8.1.9.j *J 11 East*

Site Description and Existing Conditions

J 11 East is located on two privately owned parcels east of San Ysidro Boulevard near the Mexican border in Otay Mesa. The vernal pools are located within the MHPA and are not conserved. The site is zoned Open Space, and surrounding land uses include MHPA and non-MHPA open space and the U.S. Border fence, with residential developments being proposed for areas to the north.

Two vernal pools (2,541 m^2 combined basin area [0.628 acres]) were mapped in 2003. The basins occur in Olivenhain cobbly loam and upland vegetation is Diegan coastal sage scrub. *B. sandiegonensis* were present at the site in 2003. *O. californica* was observed in 1986 (Bauder, 1986).

This area is often referred to as the "slump block" pools due to the mass settling of slopes that led to the formation of these basins. The average size of these vernal pools is significantly greater than other natural pools in San Diego because of this unique topography. The vegetation at these basins is characterized by wetlands species, and the basins have been invaded by *Tamarisk* spp.

Threats

Development

J 11 East is privately owned and not conserved. The parts of each parcel that contain vernal pools are within the MHPA; however, development is not precluded from the entire site.

Invasive Species

Invasive species such as *Tamarisk* spp. occur in the vernal pools basins.

Edge Effects

Development of southern Otay Mesa may isolate the J 11 East vernal pools from surrounding open space and nearby vernal pool complexes.

Trespass

Impacts occur from recreational off-road vehicles, illegal immigrant traffic and Border Patrol vehicles.

Litter

The site may be impacted by wind-blown debris, litter, itinerant encampments and illegal dumping. Development of proposed residential neighborhoods around the site may minimize or exacerbate these impacts.

Fire and Fire Suppression

The J 11 East vernal pools are located in an open space area. The site may serve as a staging area in the event of a canyon fire if defensible structures are developed in the vicinity.

Current Management Activities

There are no management activities planned or currently underway at J 11 East.

Management Recommendations

The portion of this site containing vernal pools and within the MHPA is recommended for conservation through public acquisition or private mitigation. Any proposed development on the remaining portions of the site should consider vernal pools on adjacent parcels, and mitigation strategies and preserve design shall minimize impacts from isolation.

Restoration and/or enhancement of the vernal pools on-site may be appropriate given the higher species diversity of nearby vernal pool sites, and consideration should be given to sensitive species that historically occurred at this site.

This site was identified as necessary to stabilize the populations of *E. aristulatum, P. nudiuscula, O. californica, N. fossalis, B. sandiegonensis,* and *S. woottoni,* by the adopted *Recovery Plan for Vernal Pools of Southern California* (USFWS, 1998). All future management and/or restoration activities should promote the recovery and success of these species.

The following conditions shall be met if the site is used for mitigation or acquired for conservation.

Fencing shall be installed to preclude access while maximizing connectivity with adjacent open space areas with lower risk of trespass. Appropriate bilingual signage shall be developed with both educational and no-trespassing elements.

A qualified biologist shall assess the site for non-native, invasive species (e.g. *Tamarisk* spp.), and shall recommend and implement a removal plan. If invasive species control measures are required, weeding within and immediately adjacent to vernal pools should be done by hand. In upland areas, mechanized removal may be appropriate; however, herbicides should not be used within or adjacent to vernal pools.

An endowment should be provided to fund required annual maintenance such as biological monitoring, fencing repair and trash removal.

If the site is used for mitigation, a fire management plan shall be prepared and included in the adopted Habitat Management Plan.

It is recommended that educational programs be provided through local schools, Home-Owner's Associations (HOAs), community groups, etc. Topics may include the local ecosystem, including vernal pools, habitat preservation (i.e. MSCP), and should incorporate hands-on learning via neighborhood hikes, etc. Programs should strive to present information in a manner that will increase interest in the natural world and cultivate local stewardship of open space, with the overall goal of developing positive neighborhood awareness of the preserve.

Figure 52

J 11 East

0.09
Miles
Kilometers
0.2

- Roads
- MHPA
- Conserved Lands
- Vernal Pools at Site
- Adjacent Vernal Pools
- Grassland
- Riparian Scrub
- Disturbed Land
- Agriculture

Note: MHPA and Roads not shown in top map; vegetation mapping per Ogden 1997.

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8.1.9.k *J 11 West*

Site Description and Existing Conditions

J 11 West is located on two privately owned parcels (a total of 41 ha) east of San Ysidro Boulevard near the Mexican border in Otay Mesa. The vernal pools are located within the MHPA and are not conserved. The site is zoned Open Space, and surrounding land uses include MHPA and non-MHPA open space and the U.S. Border fence, with residential developments being proposed for areas to the north.

Five vernal pools (1,996 m^2 combined basin area [0.493 acres]) were mapped in 2003. The basins occur in Olivenhain cobbly loam and are surrounded by Diegan coastal sage scrub. *M. minimus* and *B. sandiegonensis* were present in 2003.

The J 11 West basins are often referred to as the "slump block" vernal pools due to the mass settling of slopes that led to their formation. The average size of these vernal pools is significantly greater than other natural pools in San Diego because of their unique origin. The vegetation at these basins tends to favor wetlands species, and the basins have been invaded by *Tamarisk* spp.

Threats

Development

J 11 West is privately owned and not conserved at this time; however, the site is zoned Open Space and is within the MHPA. On-site development may directly impact the basins, and indirect impacts may occur if off-site construction isolates this site from surrounding open space and nearby vernal pool complexes.

Invasive Species

Invasive species such as *Tamarisk* spp. occur in the vernal pools basins.

Edge Effects

Development of lower Otay Mesa may isolate the J 11 West vernal pools from surrounding open space and nearby vernal pool complexes.

Trespass

Impacts occur from recreational off-road vehicles, immigrant traffic and Border Patrol vehicles.

Litter

The site may be impacted by wind-blown debris, litter, itinerant encampments and illegal dumping. Development of proposed residential neighborhoods around the site may minimize these impacts.

Fire and Fire Suppression

The J 11 West vernal pools are located in an open space area. The site may serve as a staging area in the event of a canyon fire if defensible structures are developed in the vicinity.

Current Management Activities

There are no management activities planned or currently underway for J 11 West.

Management Recommendations

The portion of this site containing vernal pools and within the MHPA is recommended for conservation through public acquisition or private mitigation. Any proposed development on the remaining portions of the site should consider vernal pools on adjacent parcels during mitigation and preserve design to minimize impacts from isolation.

Restoration and/or enhancement of the vernal pools may be appropriate given the higher species diversity of nearby vernal pool sites, and should be considered if conservation occurs.

This site was identified as necessary to stabilize the populations of *E. aristulatum, P. nudiuscula, O. californica, N. fossalis, B. sandiegonensis,* and *S. woottoni,* by the adopted *Recovery Plan for Vernal Pools of Southern California* (USFWS, 1998). All future development and/or management activities should promote the recovery and success of these species.

The following conditions shall be met if the site is used for mitigation or acquired for conservation.

Fencing shall be installed to preclude access while maximizing connectivity to adjacent open space areas with lower risk of trespass. Appropriate bilingual signage shall be developed with both educational and no-trespassing elements.

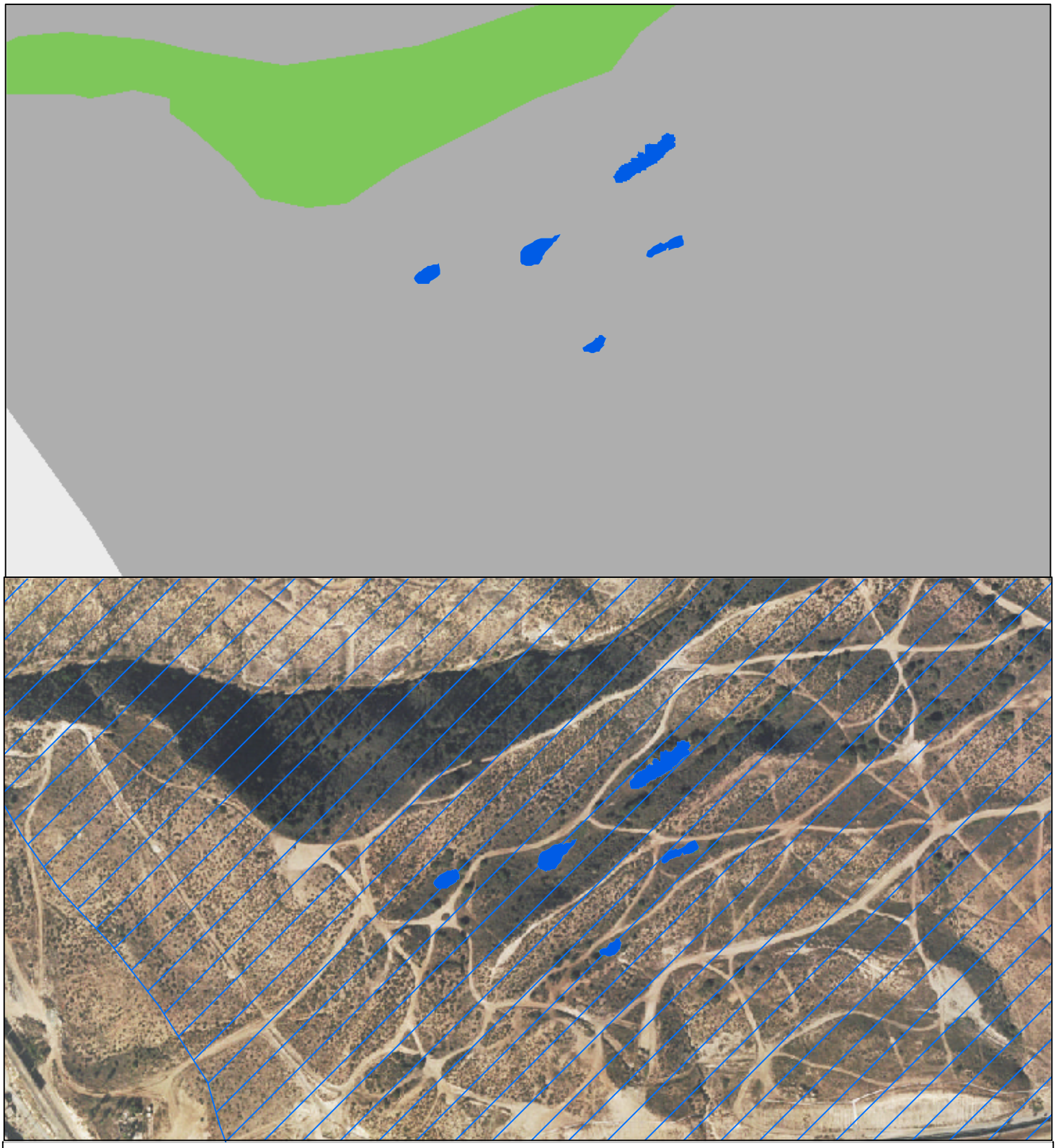
A qualified biologist shall assess the site for non-native, invasive species (e.g. *Tamarisk* spp.), and shall recommend and implement a removal plan. If weed control is required, weeding within or immediately adjacent to vernal pools should be done by hand. In upland areas, mechanized methods may be necessary; however, herbicides should not be used in the vicinity of vernal pools.

An endowment should be provided to fund required annual management and maintenance such as biological monitoring, repair of fencing and trash removal.

If the site is used for mitigation, a fire management plan shall be prepared and included in the adopted Habitat Management Plan.

It is recommended that educational programs be provided through local schools, Home-Owner's Associations (HOAs), community groups, etc. Topics may include the local ecosystem, including vernal pools, habitat preservation (i.e. MSCP), and should incorporate hands-on learning via neighborhood hikes, etc. Programs should strive to present information in a manner that will increase interest in the natural world and cultivate local stewardship of open space, with the overall goal of developing positive neighborhood awareness of the preserve.

Figure 53



J 11 West

0.05

Miles

Kilometers

0.2

- Roads
- MHPA
- Conserved Lands
- Vernal Pools at Site
- Adjacent Vernal Pools
- Grassland
- Disturbed Land
- Urban/Developed

Note: MHPA and Roads not shown in top map; vegetation mapping per Ogden 1997.

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8.1.9.k *J 12*

Site Description and Existing Conditions

J 12 is located on a privately-owned, 164-acre parcel in Spring Canyon in Otay Mesa. The vernal pools are located within the MHPA and are not conserved. The site is zoned Open Space and surrounding land uses include MHPA and non-MHPA open space, with residential developments being proposed for adjacent and northern parcels. J 13 East is located on the same parcel.

Five vernal pools (1,116 m^2 combined basin area [0.278 acres]) were mapped in 2003. The basins occur in Olivenhain cobbly loam and upland vegetation is Diegan coastal sage scrub and non-native grasslands.

Some of these basins have been invaded by black mustard (*Brassica nigra*) and have also been impacted by dumping. For example, a rusted car was abandoned in one of the vernal pools.

Threats

Development

J 12 is privately owned and not conserved; however, the portions of each parcel that contain vernal pools are within the MHPA.

Invasive Species

Invasive species such as *Brassica nigra* occur in the vernal pools basins.

Trespass

Impacts occur from recreational off-road vehicles, immigrant traffic and Border Patrol vehicles.

Litter

The site may be impacted by wind-blown debris, litter and itinerant encampments. Dumping has been a major threat to these basins; for example, a car has been dumped in one of the J 12 pools. Development of proposed residential neighborhoods around the site may minimize these impacts.

Edge Effects

Development of lower Otay Mesa may isolate the J 12 vernal pools from surrounding open space and nearby vernal pool complexes.

Fire and Fire Suppression

The J 12 vernal pools are located in a currently undeveloped area. The site may serve as a staging area in the event of a fire if defensible structures are developed in the vicinity.

Current Management Activities

No management activities are planned or currently underway.

Management Recommendations

The portion of this site containing vernal pools and within the MHPA is recommended for conservation through public acquisition or private mitigation. Any proposed development on the remaining portions of the site should consider vernal pools on adjacent parcels during mitigation and preserve design to minimize impacts from isolation.

Restoration and/or enhancement of the vernal pools on-site may be appropriate given both the historic records of sensitive species (*E. aristulatum* and *O. californica* [Bauder, 1986]) and the higher species diversity of nearby vernal pool sites, and should be considered if conservation occurs.

This site was identified as necessary to stabilize the populations of *E. aristulatum, P. nudiuscula, O. californica, N. fossalis, B. sandiegonensis,* and *S. woottoni,* by the adopted *Recovery Plan for Vernal Pools of Southern California* (USFWS, 1998). All future management activities should promote the recovery and success of these species.

The following conditions shall be met if the site is used for mitigation or acquired for conservation.

Debris shall be removed from vernal pool basins. Debris removal shall occur by hand or with equipment that is staged and positioned outside of vernal pool basins; qualified biologists shall monitor all removal activities to ensure that no impacts to the basins occur.

Fencing shall be installed to preclude access while leaving the site open to adjacent open space areas with lower risk of trespass. Appropriate bilingual signage shall be developed with both educational and no-trespassing elements.

A qualified biologist shall assess the site for non-native, invasive species (e.g. *Brassica nigra*), and shall recommend and implement a removal plan. Weeding within and immediately adjacent to vernal pools should be done by hand. Herbicides should not be used in the vicinity of the vernal pools.

An endowment should be provided to fund required annual maintenance such as biological monitoring, repair of fencing and trash removal.

If the site is used for mitigation, a fire management plan shall be prepared and included in the adopted Habitat Management Plan.

It is recommended that educational programs be provided through local schools, Home-Owner's Associations (HOAs), community groups, etc. Topics may include the local ecosystem, including vernal pools, habitat preservation (i.e. MSCP), and should incorporate hands-on learning via neighborhood hikes, etc. Programs should strive to present information in a manner that will increase interest in the natural world and cultivate local stewardship of open space, with the overall goal of developing positive neighborhood awareness of the preserve.

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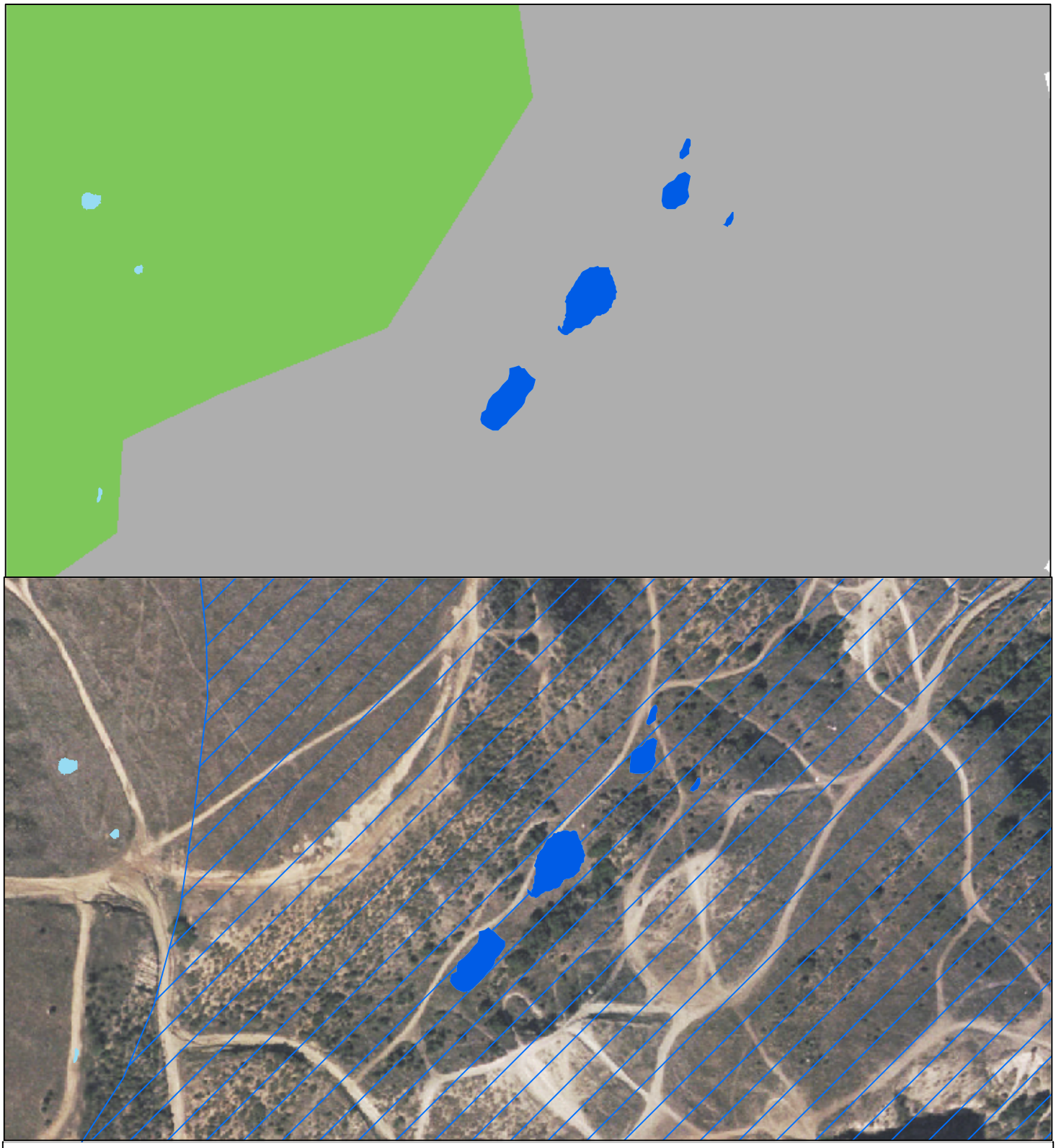
Figure 54



J 12

0.04
Miles
Kilometers
0.1

Roads
MHPA
Conserved Lands
Vernal Pools at Site
Adjacent Vernal Pools
Grassland
Disturbed Land

Note: MHPA and Roads not shown in top map; vegetation mapping per Ogden 1997.